

such as voice, video, or data. As a result, in the multimedia applications, the Layer 2 functionality applied to data is the same, regardless of whether the data is voice, video, or data. This sameness of lower level functionality regardless of data type holds true of Ahmed as well. Ahmed merely teaches the functions of each layer in a protocol layering scheme for assembling and transmitting a data packet in a mobile IP communication system. Ahmed notes that packets may be provided different quality of service, but this is a higher level service provided by the Subnetwork Layer in Ahmed (FIG. 3B) that is imperceptible to the lower layers. Nowhere does Ahmed teach the lower layers providing services, such as channel coding and decoding, that are differentiated based on the contents of the data that is being concurrently transferred during a multimedia session. The Examiner even acknowledges that Ahmed does not teach a decoding, based upon the content of each individual stream, the multiple streams of a multimedia session to form multiple decoded streams. The Examiner then states that decoding is inherent in receiving. However, the limitations of claim 1 of a decoding, based upon the content of each individual stream, the multiple streams of a multimedia session to form multiple decoded streams, and applying multiple decoded streams Layer 2 functionality to the multiple decoded streams, is not inherent in receiving and, as acknowledged by the Examiner, is not taught in Ahmed.

Hellwig merely teaches alternately transmitting speech and data. Nowhere does Hellwig teach lower layer services, such as channel coding and decoding, that are differentiated based on the contents of the data that they concurrently transfer during a multimedia session. This is evident from FIG. 3 of Hellwig, which depicts a single channel decoder for both speech and data. Therefore, neither Ahmed nor Hellwig, individually or in combination, teach the limitations of decoding, based upon the content of each individual stream, the multiple streams to form multiple decoded streams, and performing Layer 2 functionality upon each of the multiple decoded streams. Accordingly, the applicants respectfully request that claim 1 may now be passed to allowance.

Since claims 2-14 depend upon allowable claim 1, the applicants respectfully request that claims 2-14 may now be passed to allowance.

Claims 15, 21, and 23 each includes limitations of splitting a multimedia stream into component pieces, applying Layer 2 protocol to the component pieces, and applying channel coding to the component pieces. As noted above, these limitations are not taught

by Ahmed or Hellwig, individually or in combination. Accordingly, the applicants respectfully request that claims 15, 21, and 23 may now be passed to allowance.

Since claims 16 and 17 depend upon allowable claim 15, the applicants respectfully request that claims 16 and 17 may now be passed to allowance.

Claim 18 includes limitations of decoding, based upon a content of each individual stream, multiple multimedia streams and performing a Layer 2 functionality upon each of the decoded streams. As noted above, these limitations are not taught by Ahmed or Hellwig, individually or in combination. Accordingly, the applicants respectfully request that claim 18 may now be passed to allowance.

Since claims 19-20 depend upon allowable claim 18, the applicants respectfully request that claims 19-20 may now be passed to allowance.

With respect to claim 24, the Examiner states that Ahmed teaches a network (108) including multiple nodes (104), each node serving as a base station or a controller, and a mobile station (MS) (102) coupled to the network and including multiple ports. The Examiner acknowledges that Ahmed does not teach a computer coupled to the MS or the MS including a multimedia port. However, the Examiner contends that Hellwig teaches a computer coupled to an MS (FIG. 6) and that it would have been obvious to couple a computer to the MS of Ahmed and to provide an MS with multiple multimedia ports including a voice port, a video port, and a data port for connecting the MS to the computer.

The applicants respectfully disagree. As noted by the applicants above, in the prior art the lower layer functionality, which is provided by the MS when the MS is connected to a data terminal such as a computer and is acting like a wireless modem for the computer (as opposed to the higher layer functionality which is provided by the computer), is ignorant of the content of the data transmitted by the MS. Therefore, in the prior art, the MS requires only a single multimedia port via which all data is transmitted to the MS, regardless of whether the data is voice, video, or data. The applicants note that the Examiner fails to point out any prior art wherein the lower layer functionality operates differently upon each stream of multiple multimedia streams, with the result that an MS providing the lower layer functionality may require different multimedia ports. By contending that it would have been obvious for one of ordinary skill in the art to provide an MS with multiple multimedia ports including a voice port, a video port, and a data port for connecting the MS to the computer, the Examiner is impermissibly engaging

in little more than hindsight analysis based on the applicants' disclosure.

M.P.E.P. §2142 provides the conclusion of obviousness "must be reached on the basis of facts gleaned from the prior art." That is, a conclusion of obviousness is proper "so long as it takes into account only knowledge which was within the level of ordinary skill in the art...and does not include knowledge gleaned only from the applicant's disclosure" M.P.E.P. §2145(j)(1). In the instant case, the only apparent source of the teaching of providing an MS with multiple multimedia ports including a voice port, a video port, and a data port for connecting the MS to the computer is the instant application; the Examiner cites no prior art in support. In fact, the background of the instant application notes that the voice, video, and data are multiplexed together before being sent to a channel coder (that is, the MS). Accordingly, there is no need, and it is not obvious, for an MS of the prior art to have multiple multimedia ports. Therefore, the limitations of claim 24 are not obvious and the applicants respectfully request that claim 24 may now be passed to allowance.

Since claims 25-27 depend upon allowable claim 24, the applicants respectfully request that claims 25-27 may now be passed to allowance.

With respect to the improper form of claims 19 and 20, the applicants have amended claims 19 and 20 to properly reference claim 18.

As the applicants have overcome all substantive rejections and objections given by the Examiner and have complied with all requests properly presented by the Examiner, the applicants contend that this Amendment, with the above discussion, overcomes the Examiner's objections to and rejections of the pending claims. Therefore, the applicants respectfully solicit allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter.

Respectfully submitted,

Stephen L. Spear, et al.

By: 

Steven A. May
Attorney for Applicant
Registration No. 44,912
Phone No.: 847/576-3635
Fax No.: 847/576-3750

Version with Markings to Show Changes Made

19. (Once Amended) A method for [transmitting] receiving multimedia in accordance with claim 18, further comprising the step of sending the multimedia stream to a network.

20. (Once Amended) A method for [transmitting] receiving multimedia in accordance with claim 18, wherein the step of receiving a plurality of streams comprises the step of receiving a plurality of streams over the air.